



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/603,128	06/23/2000	ARIJIT MUKHERJI	062891.0397	1473
7590	03/04/2005		EXAMINER	
BARTON E SHOWALTER BAKER BOTTS LLP 2001 ROSS AVENUE DALLAS, TX 75201-2980			HAN, QI	
			ART UNIT	PAPER NUMBER
			2654	

DATE MAILED: 03/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/603,128	MUKHERJI ET AL.
	Examiner Qi Han	Art Unit 2654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 09/17/2004.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,6-8,13-17,22-24,28,29,31 and 36-48 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1,6-8,13-17,22-24,28,29,31 and 36-48 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Response to Amendments

2. This communication is responsive to the applicant's amendment dated 09/17/2004.
Applicant amended claim 8.

Response to Arguments

3. Applicant's arguments with respect to claims rejection (claims 1-48) under 35USC 103 have been considered but they are not persuasive.

In response to applicant's arguments dated 09/17/2004, regarding claim 1 (similarly applied to claim 8, 17, 24, 31 and 38), that the prior art fails to teach or suggest “generating a first stream of packets encoding the text” and “communicating the first stream of packets to the remote participant using transmission control protocol (TCP)” (page 10, last paragraph to page 11, paragraph 3), examiner respectfully disagrees with applicant’s argument and has a different view of the prior art teachings and the claim interpretations. It is noted that, in general, by reviewing the claim limitation and the rejection, the combined prior art teachings disclose all limitations as claimed, as stated in the claim rejection (see detail in the claim rejection). It is also noted that the cited paragraphs 297-298 of Pickett are highly related to the claimed limitations, because they clearly teaches the argued portion of the claimed limitations (also see detail in the

claim rejection). For example, Pickett discloses that “data streams may be desirably coupled to a resource … to have processes such… speech to text conversion, compression … from the LAN, WAN”, and “provide … transcoding, streaming and storing, packetizing (such as to prepare a data format such as an email” and “communications system may be programmed so that particular users automatically have voice mail store as voice mails and also an email (text—first stream) or other data form… which may be stored, send (communicate) over the WAN or LAN”. Further, in paragraph 194, Pickett teaches that “the packetized data stream (including text, like email)… is in a suitable form/protocol (such as TCP) for transmission to a remote computer …” and using “WAN service network”, which provides conjunction with paragraphs 297-298. Pickett also disclose using H.323 standard for data stream (paragraph 11), packet communication (paragraph 194) and multimedia/communication applications (paragraph 370), which inherently has capability of implementing transmitting packeted text data using TCP protocol and transmitting packeted voice data using DUP), since the objective of H.323 standard is for multimedia-communication and incorporated with multiple other data transmission protocols including TCP for data and DUP for voice. As stated above, examiner believes that the combined teachings in the claim rejection properly read on the claimed and argued limitations.

In response to applicant's arguments regarding claim 40 that “Pickett in view of Sharman fails to teach or suggest every element of this claim” (page 11, paragraph 4 to page 12, paragraph 3), examiner respectfully disagrees with applicant's argument and has a different view of the prior art teachings and the claim interpretations. It is noted that in paragraph 105 Pickett discloses that “such signal (testing signal) processing could be done periodically, or upon detection of errors, start-up, or upon initiation of a diagnostic or maintenance routine, which

suggest that the line quality assessment (equivalently interpreted as detecting a degradation in a quality of the packet-based voice lines) has the capability as claimed. Further, it is noted that the cited disclosure in paragraph 363 of Pickett also suggests the claimed limitation, since operations of ‘dynamically adjustable jitter buffers, packet-loss correction and noise-level matching’ necessarily includes a step of detecting a quality related measure from transmitting data path (line). Furthermore, it is noted that combining Sharman’s teaching is to further support the rejection regarding the claimed limitation “voice communication session **before** the first stream (text session)”, even though no logical or consequent actions in the claimed context show a necessity of using this communication order. Based on the statement above, the examiner believes that the combined teachings in the claim rejection properly read on the claimed and argued limitations.

Claim Rejections - 35 USC § 103

4. Claims 1, 6-8, 13-17, 22-24, 28-29, 31 and 36-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pickett (US 2002/0001302 A1), in view of Sharman et al. (US 6,100,882), hereinafter referenced as Sharman.

Regarding **claim 1**, Pickett discloses systems and methods for multiple mode voice and data communications using intelligently bridged TDM and packet buses and methods for performing telephony and data functions using the same (title), in which VoIP communications attempts to provide reasonable voice communications over data/packet networks by allowing voice and signaling information to be transported over the data/packet network, and an IP network typically is used to transport the calls, which generally may be over an intranet or over

the Internet (paragraph 367) that inherently provides packet based communication session for voice and text data, which corresponds to the claimed “communicating voice and text associated with a packet based voice communications session”. Pickett further discloses that:

receiving voice information from a local participant in a packet-based voice communications session having at least one remote participant, (paragraph 194 and Figs. 3 and 13C, ‘computer 24 (local and remote participants) is coupled to communications system 50 (network) over packet bus 80A’, ‘a microphone (for receiving voice information)’, ‘through an appropriate packet standard’, ‘H.323’ ‘for transmission to a remote computer’; paragraph 370, ‘H.323 terminal... used for real-time bi-directional multimedia communication’);

converting the voice information into text, (paragraph 297, ‘speech/voice recognition’, ‘speech to text conversion, compression, translation’);

generating a first stream of packets encoding the text (paragraph 297, ‘speech to text conversion’, ‘compression (broadly interpreted as encoding)’, ‘data stream from the LAN, WAN ..may be desirably coupled to resources’ that inherently includes packet based transmission; paragraph 298, ‘processes the voice data stream into another form (e.g. email (text))’);

generating a second stream of packets encoding the voice information (paragraph 74, ‘coding/decoding function’, ‘voice compression’, ‘voice communication using an Internet protocol (“IP”) or other voice over other network protocol’ that inherently uses packet-based transmission);

communicating the first stream of packets to the remote participant using transmission control protocol (TCP) (paragraph 194, ‘processes the packetized data stream... in a suitable form/protocol (such as TCP/IP) for transmission to a remote computer’; paragraph 297, ‘speech

to text conversion (corresponding to the first stream)... thus data stream from the LAN, WAN,

modem (through communicating)... ', which suggest that text type of data stream can be

communicated in the LAN that is packet-based network; paragraph 298, 'another form

(including text form) may be stored, send (communicate) over the WAN or LAN');

communicating the second stream of packets to the remote participant using user datagram protocol (UDP) (paragraphs 374 and 388, 'addressing in VoIP (the second stream)',

'UDP header containing source and destination sockets', 'voice data is traveling over a data

network inside TCP or UCP packets');

wherein the packet-based voice communications session comprises an Internet protocol (IP) telephony communications session, (paragraph 367, 'VoIP communications... voice communications over data/packet networks...' and 'an IP network typically is used to transport the calls, which generally may be over an intranet or over the Internet').

In addition, Pickett discloses that the system provides Voice over IP (VoIP) technique (paragraph 361), uses H.323 standard (paragraph 368), and uses H.323 terminals that can either be a PC or a standalone device and provides audio communications while optionally supporting video or data communications (paragraph 361), which further supports to implement the functionality as stated above because both VoIP and H.323 are packet-based communications and H.323 supports multimedia communications including audio and text.

Even though Pickett discloses the capability of generating and communicating packeted text data stream and voice data steam, as stated above, Picket does not expressly teach that the text data stream is associated with the content of voice data stream during the generating and communicating processes. However, this feature is well known in the art as evidenced by

Sharman who discloses textual recoding of contributions to audio conference using speech recognition (title), comprising a distributed system performing speech recognition to convert speech to text at local workstation (column 2, lines 50-65), and transmitting the both speech (voice data stream) and the converted text (data stream) to the other workstation(s) (abstract). Therefore, it would have been obvious to one of ordinary skill in the art at time the invention was made to modify Pickett by specifically providing the converted text (data stream) associated with the voice data stream during the generating and communicating processes, as taught by Sharman, for the purpose of offering voice and text with natural conversation and providing optional feature of automatic translation for multilingual conferences (Sharman: column 3, lines 10-20).

Regarding **claim 6** (depending on 1), Pickett in view of Sharman further discloses displaying the text using a visual output device, (Pickett: paragraph 194 and Fig. 3, ‘computer terminal (also H.323 terminal) 24’; paragraph 72, ‘processor/system resources 70 also may include a display device’; Sharman: Fig. 9, blocks 945 and 955).

Regarding **claim 7** (depending on 1), Pickett in view of Sharman further discloses receiving packets encoding remote voice information and remote text from the remote participant; outputting the remote voice information using an acoustic output device; and displaying the remote text using a visual output device, (Pickett: paragraph 194 and Fig. 3 and 13C, ‘computer 24 (Fig. 13C) includes ... speaker’; paragraph 370, ‘multimedia communication application(s)’; paragraph 72, ‘processor/system resources 70 also may include a display device’; Sharman: Fig. 9, blocks 945 and 955).

Regarding **claim 8**, it discloses an interface for a telecommunication device, which corresponds to the combined method claims 1 and 7. The rejection is based on the same reason described for claims 1 and 7, because the claims 8 recite same or similar limitation(s) as claims 1 and 7.

Regarding **claim 13**, (depending on 1), Pickett in view of Sharman further discloses to:

receive local voice information from a local participant in the packet-based voice communications session, (Pickett: paragraph 194 and Figs. 3 and 13C, ‘computer 24 (local and remote participants) is coupled to communications system 50 (network) over packet bus 80A’, ‘a microphone (inherently used for receiving local voice information)’, ‘through an appropriate packet standard’, ‘H.323’ ‘for transmission to a remote computer’; paragraph 370, ‘H.323 terminal... used for real-time bi-directional multimedia communication’);

convert the local voice information into local text (Sharman: column 2, lines 50-65, ‘performing local speech recognition’, ‘speech from that workstation is converted into text’);

generate packets encoding the local voice information and the local text (Pickett: paragraph 297, ‘speech to text conversion’, ‘compression (broadly interpreted as encoding)’, ‘data stream from the LAN, WAN ... may be desirably coupled to resources’ that inherently includes packet based transmission; paragraph 298, ‘processes the voice data stream into another form (e.g. email, data file, etc.)’ that includes text form; Sharman: column 5, lines 49-50, ‘capable of sending text message from one machine to another’ that also inherently includes encoding and packetizing); and

communicate the packets encoding the local voice information and the local text to the remote participant, (Pickett: paragraph 194, ‘processor/system resources 70 (Fig.3) processes the

packetized data stream, which preferably now is in a suitable form/protocol (such as TCP/IP) for transmission to a remote computer'; paragraph 298, 'another form (including text form) may be stored, send over the WAN or LAN'; Sharman: column 3, lines 59-61, 'transmitting the local text equivalent of said local speech input to the other workstation(s)(remote participant) in the conference').

Regarding **claim 14**, Pickett and Sharman disclose everything claimed, as applied above (see claim 8). Pickett further discloses using H.323 terminals that can be a PC and provides audio communications while optionally supporting video or data communications (paragraph 370), wherein PC inherently includes the embodied software or program, such as windows operating system and GUI tools, which corresponds to the claimed "the interface comprises a computer program embodied in a computer readable medium."

Regarding **claim 15**, Pickett and Sharman disclose everything claimed, as applied above (see claim 8). Pickett in view Sharman further discloses that data streams may be desirably coupled to a resource such as DSP 76 in order to have processes such as speech to text conversion (Pickett: paragraph 297), plus speech synthesis to convert the text into the correct language (herein referring speech language) (Sharman: column 3, lines 18-19), which corresponds to the claimed "operable to output the voice information using speech synthesis to convert the text into an audio output".

Regarding **claim 16**, Pickett and Sharman disclose everything claimed, as applied above (see claim 8). Pickett in view Sharman further discloses that an automatic translation unit could be interposed between the speech recognition and speech synthesis to convert the text into the

correct language for each participant (Sharman: column 3, lines 16-19), which corresponds to the claimed “operable to translate the text from a first language to a second language”.

Regarding **claims 17 and 22-23**, they disclose telephony communication software embodied in a computer readable medium for a telecommunication device, which corresponds to the method claims 1 and 6-7, respectively. The rejection is based on the same reason described for claims 1 and 6-7 respectively, because the claims 17 and 22-23 recite same or similar limitation(s) as claims 1 and 6-7 respectively.

Regarding **claim 24**, it discloses a telecommunication system, which corresponds to the combined method claim 1. The rejection is based on the same reason described for claim 24 because the claim recites same or similar limitation(s) as claim 1.

Regarding **claims 28-29** (depending on claim 24), the rejection is based on the same reason described for claims 16 and 15 respectively, because claims 28 and 29 recite same or similar limitation(s) as claims 16 and 15, respectively.

Regarding **claims 31 and 36-37**, they disclose an apparatus (device), which corresponds to the method claims 1 and 6-7, respectively. The rejection is based on the same reason described for claims 1 and 6-7 respectively, because claims 31 and 36-37 recite same or similar limitation(s) as claims 1 and 6-7, respectively.

Regarding **claim 38**, Pickett discloses systems and methods for multiple mode voice and data communications using intelligently bridged TDM and packet buses and methods for performing telephony and data functions using the same (title), in which VoIP communications attempts to provide reasonable voice communications over data/packet networks by allowing voice and signaling information to be transported over the data/packet network, and an IP

Art Unit: 2654

network typically is used to transport the calls, which generally may be over an intranet or over the Internet (paragraph 367) that inherently provides packet based communication session for voice and text data, which corresponds to the claimed “communicating voice and text associated with a packet-based voice communications session”. Pickett further discloses that:

receiving voice information from a local participant in a packet-based voice communications session having at least one remote participant (paragraph 194 and Figs. 3 and 13C, ‘computer 24 (local and remote participants) is coupled to communications system 50 (network) over packet bus 80A’, ‘a microphone (inherently used for receiving voice information)’, ‘through an appropriate packet standard’, ‘H.323’ ‘for transmission to a remote computer’; paragraph 370, ‘H.323 terminal... used for real-time bi-directional multimedia communication’);

detecting degradation in a quality of the packet-based voice communications session (paragraph 105, ‘line quality assessment’; paragraph 363, ‘enhance voice quality’, ‘dynamically adjustable jitter buffer, packet-loss correction, and noise-level matching’, which inherently includes detecting a degradation as claimed);

converting the voice information into text, (paragraph 297, ‘speech/voice recognition’, ‘speech to text conversion’, compression, translation’);

generating a first stream of packets encoding the text, (paragraph 297, ‘speech to text conversion’, ‘compression (broadly interpreted as encoding)’, ‘data stream from the LAN, WAN ... may be desirably coupled to resources’ that inherently includes packet based transmission; paragraph 298, ‘processes the voice data stream into another form (e.g. email, data file, etc.)’ that includes text form);

generating a second stream of packets encoding the voice information, (paragraph 74, ‘coding/decoding function’, ‘voice compression’, ‘voice communication using an Internet protocol (“IP”) or other voice over other network protocol’ that inherently using packet based transmission);

communicating the first stream of packets using transmission control protocol (TCP), (paragraph 194, ‘processor/system resources 70 (Fig.3) processes the packetized data stream, which preferably now is in a suitable form/protocol (such as TCP/IP) for transmission to a remote computer’; paragraph 298, ‘processes the voice data stream into the another form (e.g., email (text), data file, etc.), which may be stored, send over the WAN or LAN’);

communicating the second stream of packets using user datagram protocol (UDP), (paragraphs 374 and 388, ‘addressing in VoIP is provided in a manner to determine ..., the destination IP address’, ‘UDP header containing source and destination sockets’, ‘voice data is traveling over a data network inside TCP or UCP packets’);

receiving packets encoding remote voice information and remote text from the remote participant (paragraph 2, ‘receiving voice and data in multiple modes’; paragraphs 118, ‘remote computers received a message (text); paragraphs 197, ‘VoIP (voice over IP) communication’ ‘IP packeting’; paragraphs 141, ‘text message’ ‘accepting the call’);

outputting the remote voice information using an acoustic output device, (paragraph 194 and Fig. 3 and 13C, ‘computer 24 (Fig. 13C) includes ... speaker’); and

displaying the remote text using a visual output device, (paragraph 194 and Fig. 3 and 13C, ‘computer 24’ that inherently include video or screen; paragraph 370, ‘multimedia

communication application(s)'; paragraph 72, 'processor/system resources 70 also may include a display device').

In addition, Pickett discloses that the system provides Voice over IP (VoIP) technique (paragraph 361), uses H.323 standard (paragraph 368), and uses H.323 terminals that can either be a PC or a standalone device and provides audio communications while optionally supporting video or data communications (paragraph 361), which further supports to implement the functionality as stated above because both VoIP and H.323 are packet-based communications and H.323 supports multimedia communications including audio and text.

Even though Pickett discloses the capability of generating and communicating packeted text data stream and voice data steam, as stated above, Picket does not expressly and clearly teach that the text data stream is associated with the content of the voice data stream during the generating and communicating processes and fails to specifically disclose determining that the packet-based voice communications session provides for a text communications session. However, these features are well known in the art as evidenced by Sharman who discloses textual recoding of contributions to audio conference using speech recognition (title), comprising a distributed system performing speech recognition to convert speech to text at local workstation (column 2, lines 50-65), transmitting the both speech (voice data stream) and the converted text (data stream) to the other workstation(s) (abstract). Sharman further discloses that the text recording process can be turned on and off during the audio conference (column 4, lines 1-8), which suggests that the voice communication session (audio conference) can provide for a text communication session (text recording process) as claimed. Therefore, it would have been obvious to one of ordinary skill in the art at time the invention was made to modify Pickett by

specifically providing the converted text (data stream) associated with the content of the voice data stream during the generating and communicating processes and providing a mechanism allowing an audio session to turn on/off a text session, as taught by Sharman, for the purpose of produce a set of minutes for an audio conference and ensuring optimum speech recognition (Sharman: abstract and column 9, lines 27-31).

Regarding **claim 39** (depending on 1), Pickett in view of Sharman further discloses the text recording process (text communications session) can be turned on (provided) and off during the audio conference (the voice communications session) (column 4, lines 1-8), which corresponds to the claimed “determining that the packet-based voice communications session provides for a text communications session before communicating the first stream of packets to the remote participant”.

Regarding **claim 40** (depending on 1), Pickett in view of Sharman further discloses detecting a degradation in a quality of the packet-based voice communications session before communicating the first stream of packets to the remote participant, (Pickett: paragraph 105, ‘line quality assessment (interpreted as detecting)’; paragraph 363, ‘enhance voice quality’, ‘dynamically adjustable jitter buffer, packet-loss correction, and noise-level matching’, which suggests detecting a degradation during the voice communication; Sharman: column 4, lines 1-8. ‘the text recording process can be turned on and off during the audio conference’ which suggests that voice communication session (and its quality detection) is always before the text session).

Regarding **claim 41** (depending on 8), the rejection is based on the same reason described for claim 39 because the claim recites same or similar limitation(s) as claim 39.

Regarding **claim 42** (depending on 8), the rejection is based on the same reason described for claim 40 because the claim recites same or similar limitation(s) as claim 40.

Regarding **claim 43** (depending on 17), the rejection is based on the same reason described for claim 39 because the claim recites same or similar limitation(s) as claim 39.

Regarding **claim 44** (depending on 17), the rejection is based on the same reason described for claim 40 because the claim recites same or similar limitation(s) as claim 40.

Regarding **claim 45** (depending on 24), the rejection is based on the same reason described for claim 39 because the claim recites same or similar limitation(s) as claim 39.

Regarding **claim 46** (depending on 24), the rejection is based on the same reason described for claim 40 because the claim recites same or similar limitation(s) as claim 40.

Regarding **claim 47** (depending on 31), the rejection is based on the same reason described for claim 39 because the claim recites same or similar limitation(s) as claim 39.

Regarding **claim 48** (depending on 31), the rejection is based on the same reason described for claim 40 because the claim recites same or similar limitation(s) as claim 40.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 2654

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Please address mail to be delivered by the United States Postal Service (USPS) as follows:

Mail Stop _____
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

or faxed to:

(703) 872-9306, (for formal communications intended for entry)

Or:

(703) 872-9306, (for informal or draft communications, and please label "PROPOSED" or "DRAFT")

If no Mail Stop is indicated below, the line beginning Mail Stop should be omitted from the address.

Effective January 14, 2005, except correspondence for Maintenance Fee payments, Deposit Account Replenishments (see 1.25(c)(4)), and Licensing and Review (see 37 CFR 5.1(c) and 5.2(c)), please address correspondence to be delivered by other delivery services (Federal Express (Fed Ex), UPS, DHL, Laser, Action, Purolater, etc.) as follows:

U.S. Patent and Trademark Office
Customer Window, Mail Stop _____
Randolph Building
Alexandria , VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qi Han whose telephone numbers is (703) 305-5631. The examiner can normally be reached on Monday through Thursday from 9:00 a.m. to 7:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil, can be reached on (703) 305-6954.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Inquiries regarding the status of submissions relating to an application or questions on the Private PAIR system should be directed to the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028 between the hours of 6 a.m. and midnight Monday through Friday EST, or by e-mail at: ebc@uspto.gov. For general information about the PAIR system, see <http://pair-direct.uspto.gov>.

QH/qh
February 23, 2005



DAVID D. KNEPPER
PRIMARY EXAMINER